

CLAIMS

WE CLAIM:

1. A system for retrieving information regarding a targeted person, comprising:

a content analyzer comprising a memory and a processor, the content analyzer

5 communicatively connected to a first external source for receiving content, and the processor being operative with programming to analyze the content according to a criteria;

a knowledge base being stored in the memory of the content analyzer, the knowledge base including a plurality of known relationships; and

wherein, according to the criteria, the processor of the content analyzer searches

10 the content to identify the targeted person and uses the known relationships in the knowledge base to retrieve information related to the targeted person.

2. The system of claim 1, further comprising a user profile stored in the memory of the content analyzer, the user profile including information about interests of a user of the system, and wherein the criteria comprises information in the user profile.

15 3. The system of claim 2, wherein the user profile is updated by integrating information in the request with existing information in the user profile.

4. The system of claim 2, further comprising an input device communicatively connected to the content analyzer for permitting the user to input information into the user profile or transmit a request to the content analyzer.

20 5. The system of claim 4, wherein the criteria comprises information from the request.

6. The system of claim 1, wherein the knowledge base is an ontology of related information.

7. The system of claim 1, wherein one type of the known relationships is a map of a known face to a name.

8. The system of claim 1, wherein one type of the known relationships is a map of a known voice to a name.

5 9. The system of claim 1, wherein one type of the known relationships is a map of a name to various related information.

10. The system of claim 1, wherein one of the known relationships is a map of a known name to occupation.

10 11. The system of claim 1, wherein one of the known relationships is a map of a known name to a family relationship.

12. The system of claim 1, wherein one of the known relationships is a map of an actor name to a role.

13. The system of claim 1, wherein the content is a video signal.

15 14. The system of claim 13, wherein the first external source is a cable television provider.

15. The system of claim 13, wherein the first external source is a satellite television provider.

16. The system of claim 1, wherein the content is graphical and textual data.

17. The system of claim 16, wherein the first external source is the Internet.

20 18. The system of claim 16, wherein the first external source is a database of information.

19. The system of claim 1, wherein the content analyzer is communicatively connected to a second external source and wherein the second external source is searched according the criteria to retrieve additional information related to the targeted person.

20. The system of claim 1, wherein the content analyzer is further operative with a person spotting function to extract faces, speech, and text from the content.

21. The system of claim 20, wherein the person spotting function operates to:
make a first match of known faces to the extracted faces;
make a second match of known voices to the extracted voices;
scan the extracted text to make a third match to known names; and
calculate a probability of a particular person being present in the content based on the first, second, and third matches.

22. The system of claim 1, further comprising a display device connected to the content analyzer for permitting a user to interact with the content analyzer.

23. The system of claim 22, wherein a set of results compiled by the content analyzer according to the criteria is displayed on the display device.

24. The system of claim 23, wherein the set of results is displayed as one or more links on the display device.

25. The system of claim 24, wherein, in addition to the links, the content analyzer displays one or more secondary links to a shopping a web-site such that the user can purchase goods related to the targeted person.

26. The system of claim 1, wherein the content analyzer transmits a request to an external server, the server using the request to search an external server to return clues to the content analyzer usable in determining identifying the targeted person.

27. A method of retrieving information related to a targeted person, the method comprising:

(a) receiving a video source from a first external into a memory of a content analyzer;

5 (b) receiving a request from a user to retrieve information related to the targeted person;

(c) analyzing the video source to spot the targeted person in a program;

(d) scanning additional channels of the video source for information related to the targeted person;

10 (e) searching a second external source to retrieve further information related to the targeted subject;

(f) retrieving the information found as a result of steps (d) and (e); and

(g) displaying the results on a display device communicatively connected to the content analyzer.

15 28. The method of claim 27, wherein step (c) comprises extracting faces, speech, and text from the video source, making a first match of known faces to the extracted faces, making a second match of known voices to the extracted voices, scanning the extracted text to make a third match to known names, and calculating a probability of the targeted person being present in the video source based on the first, second, and third matches.

20 29. The method of claim 27, further comprising resolving relationships and inferencing names using an ontology.

30. The method of claim 28, further comprising calculating the probability using a known relationship.

31. The method of claim 30, wherein the known relationship is a map of a name to an occupation.

32. The method of claim 30, wherein the known relationship is a map of a name to a family relationship.

5 33. The method of claim 30, wherein the known relationship is a map of an actor's name to a role.

34. A person tracking retrieval system, comprising:

a centrally located content analyzer in communication with a storage device, the content analyzer being accessible to a plurality of users and information sources via a communications network, and the content analyzer being programmed with a set of machine-readable instructions to:

receive first content data into the content analyzer;

receive a request from at least one of the users;

10 in response to receipt of the request, analyze the first content data to extract information relevant to the request; and

15 provide access to the information.